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THOMPSON
MEDICAL ADVISOR





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THE

MEDICAL ADVISER:

A

FULL AND PLAIN TREATISE

ON THE

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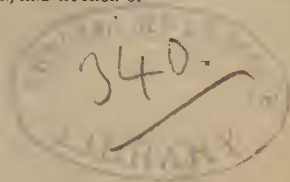
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BY

REZIN THOMPSON, M. D.,

PERMANENT MEMBER OF THE NATIONAL MEDICAL ASSOCIATION, AND AUTHOR OF
"THOMPSON ON FEVER," ETC.



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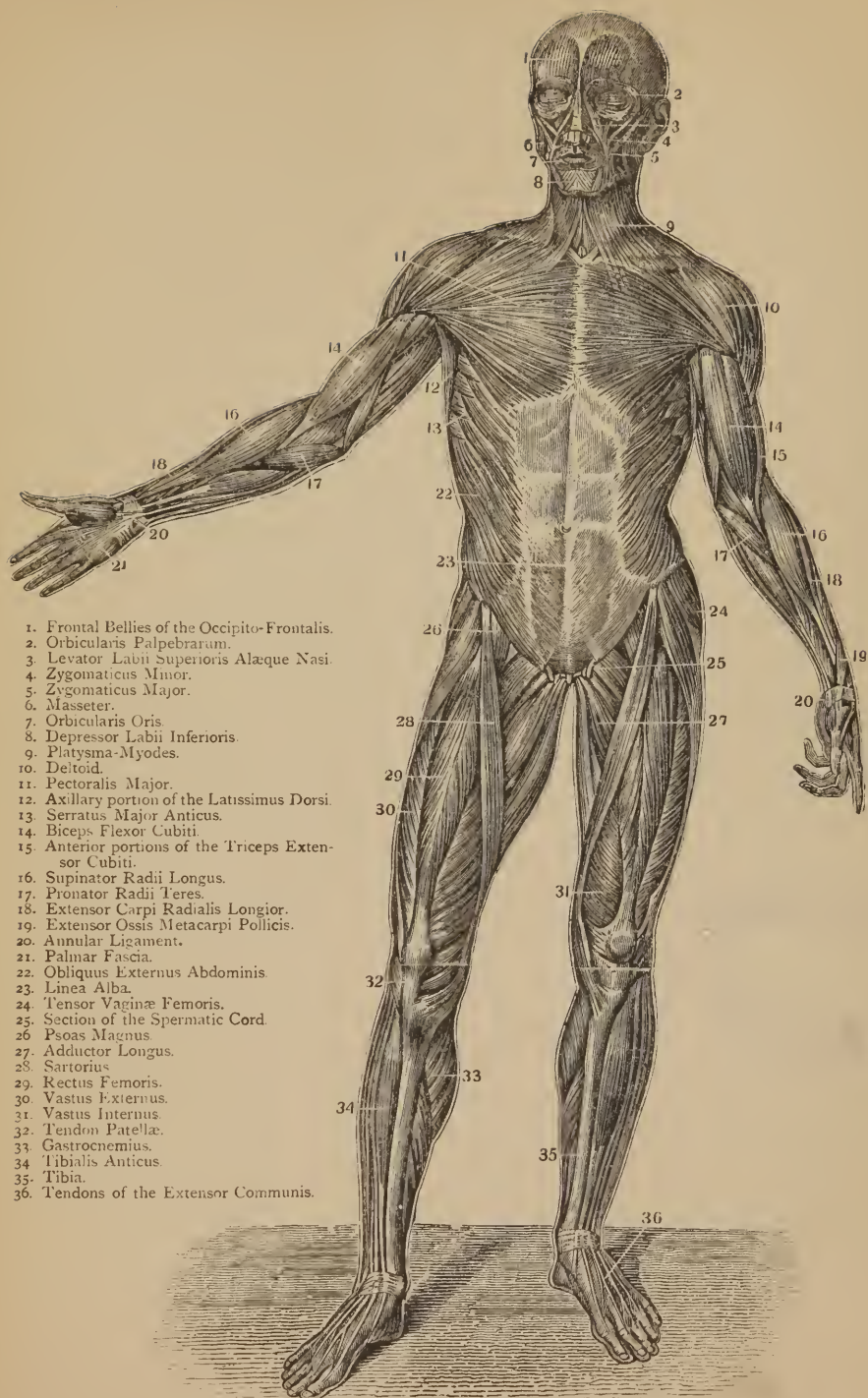
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1. Frontal Bellies of the Occipito-Frontalis.
2. Orbicularis Palpebrarum.
3. Levator Labii Superioris Alaeque Nasi.
4. Zygomaticus Minor.
5. Zygomaticus Major.
6. Masseter.
7. Orbicularis Oris.
8. Depressor Labii Inferioris.
9. Platysma-Myodes.
10. Deltoid.
11. Pectoralis Major.
12. Axillary portion of the Latissimus Dorsi.
13. Serratus Major Anticus.
14. Biceps Flexor Cubiti.
15. Anterior portions of the Triceps Extensor Cubiti.
16. Supinator Radii Longus.
17. Pronator Radii Teres.
18. Extensor Carpi Radialis Longior.
19. Extensor Ossis Metacarpi Pollicis.
20. Annular Ligament.
21. Palmar Fascia.
22. Obliquus Externus Abdominis.
23. Linea Alba.
24. Tensor Vaginæ Femoris.
25. Section of the Spermatic Cord.
26. Psoas Magnus.
27. Adductor Longus.
28. Sartorius.
29. Rectus Femoris.
30. Vastus Externus.
31. Vastus Internus.
32. Tendon Patellæ.
33. Gastrocnemius.
34. Tibialis Anticus.
35. Tibia.
36. Tendons of the Extensor Communis.

VIEW OF THE ANTERIOR MUSCLES OF THE BODY.

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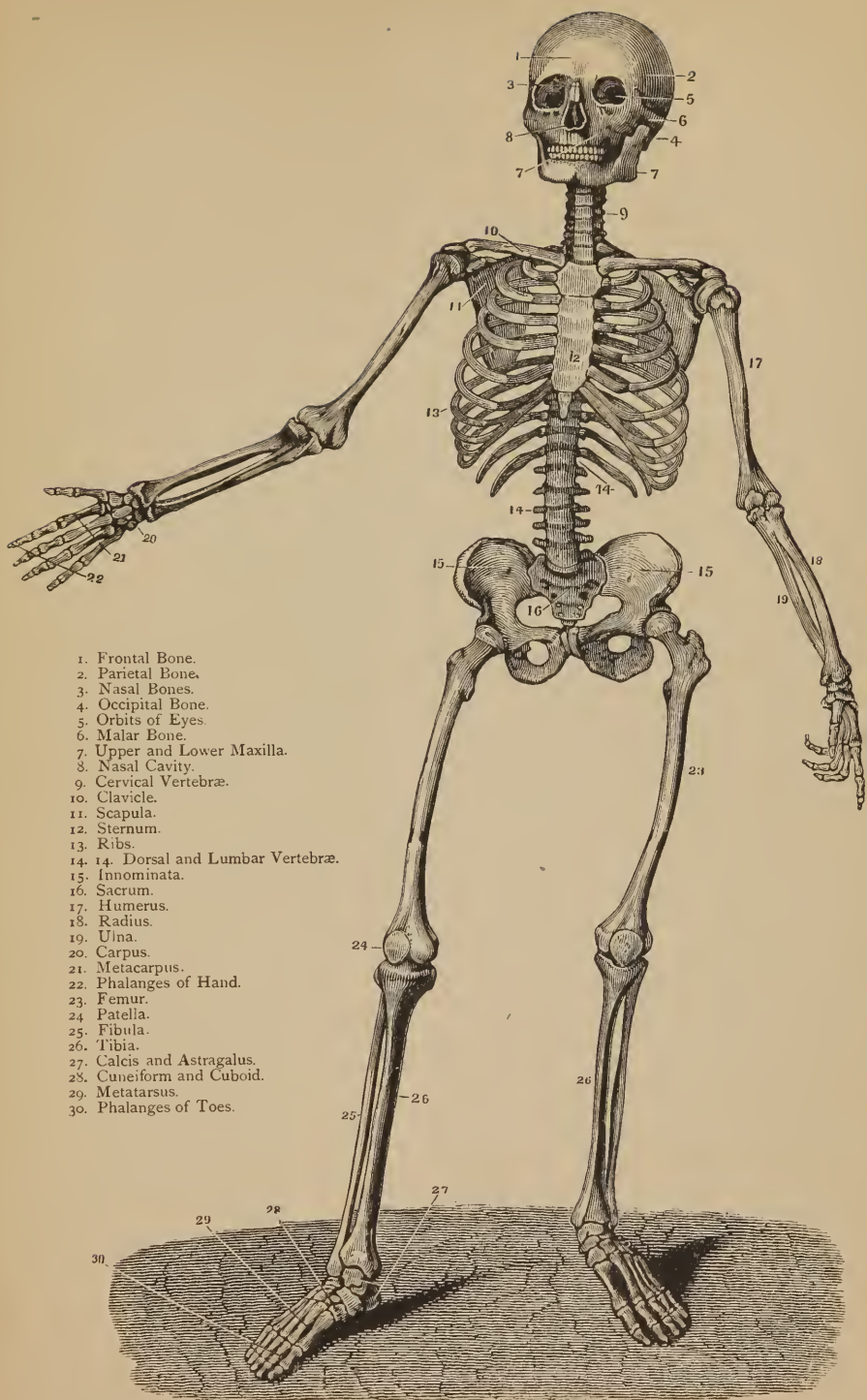
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MAY APPLE. (*Podophyllum Peltatum.*)



RUE. (*Ruta Graveolens.*)



DANDELION (*Dens Leonis.*)

INTRODUCTION.

THE author having been many years engaged in observing and treating disease, and ever watchful for any developments which might throw new light upon its nature, or lead to a better or safer treatment, came to the conclusion that he had made some progress; and, from time to time, made known to the profession his views upon various subjects through the medium of the press, medical societies, and occasional lectures to the students of Nashville Medical College. Finally he published a little book, entitled "Thompson on Fever, Dysentery, etc.," in which he gave whatever he esteemed new and valuable upon the subjects treated of in the work. The work was kindly received by the profession, and the treatment recommended has been generally found to be much more successful than any other previously adopted; in fact, the success of most of those who have reported appears to be unprecedented. As the first edition was soon exhausted, a second was imperatively called for; the author accordingly prepared an enlarged edition, which was rapidly disposed of. Quite a number of farmers and others, not of the profession, obtained the work, and had been enabled to manage their own cases of fever, pneumonia, dysentery, etc., very successfully. But as it was written expressly for physicians, though not abounding in technicalities, yet was not quite plain enough to suit the common reader; and then only a few diseases having been treated of, many such importuned the author to write

a general practice, suited to families, so that they might have something to guide them in the absence of a physician. But he felt rather a dislike for *family medical books*, being perhaps prejudiced against them by the fact that the most he had examined had been written by very incompetent persons, abounding in bad treatment and worse language, the writers not knowing how to be plain without descending to vulgarisms. Others, on the contrary, were written in a style above the comprehension of ordinary readers, and all far behind the teachings of the age.

That a work written in good, plain style, and so worded that common decency would not be outraged by having it read aloud in the family, and containing such information as would enable the reader to guard against the encroachment of many diseases, or arrest them in the forming stage, would be eminently useful, and prevent much suffering, no one can deny; and as many partial friends had impressed it upon the author that he possessed the peculiar qualifications necessary to write such a work as it should be done, he finally came to the conclusion that he could in this way do some good for his fellows, and obtained his own consent to undertake the task.

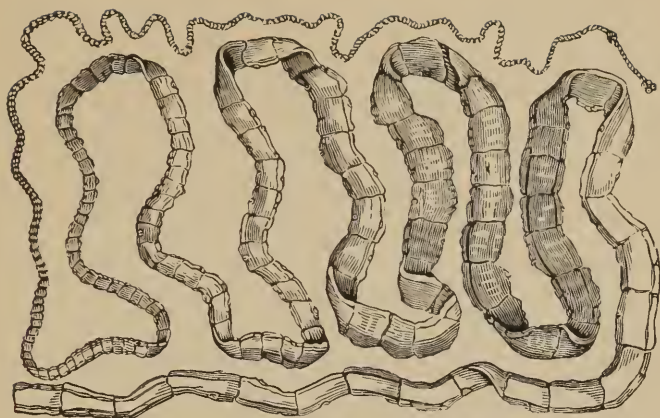
As the author has for over forty years been a member of the regular medical profession, and has labored hard, if not successfully, in advancing its usefulness and guarding its honor, he of course feels himself identified with its interests, and would be slow to undertake any enterprise that would in any way be in opposition to the one or the other. But he is very certain that to furnish the people with correct medical information is the only successful means of securing proper respect for honorable, scientific medicine, in contradistinction to the isms, humbuggery, and quackery of the day.

The fact is, that the profession has been sadly lacking in its duties to itself, and to the people, in this respect. No adequate efforts have ever been made for furnishing the masses with a pure and correct medical literature, and of course the people receive their medical ideas principally from quack advertisements, almanacs, and puffs of charlatans, whose trade it is to decry and caricature the regular profession. Even the very best writers of family medical books have not thought it worth while to reason with the people, or teach them "the why and the wherefore" of their prescriptions; taking it for granted, I suppose, that the people would not comprehend the science of diseased action. But I am very confident that this is a mistake, and that if the truth is presented in a plain and clear style, it will be attractive, and will be studied, and understood sufficiently at least to enable the reader to perceive the distinction between science and pretence. But I do not entertain the idea that this or any other work will ever make the people their own physicians, so as to supersede the services of the men who make medicine the business of their lives. Nothing short of entire devotedness to the subject can qualify a man for the important business of taking charge of the lives of his fellows; and unceasing attention to the subject is essential for keeping posted as to the progress of the science, and the varying types of disease.

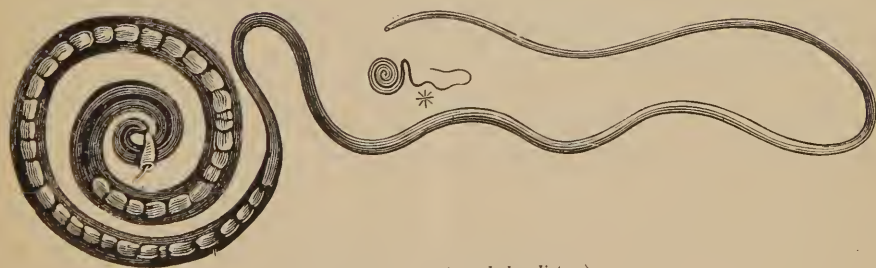
who, as a worthy contemporary has said, "serve to designate the exact state of theory and practice of the period of time when they studied their profession, or of the particular school of which they took lessons." Such practitioners still salivate, give the cava pills, or bleed and nauseate, just as their preceptors did when they studied. But to the honor of the profession it may be truly said, that physicians are generally men of intelligence and discernment, and are ever ready to embrace truth in science, and avail themselves of every better way of combating disease.

PRESENT THEORY.

The present seems to be a transition epoch, with regard to both theory and practice: the revelations of science have exploded all the old theories, and no well-digested new ones have yet been established, so as to gain any thing like the general consent of the profession. Old modes of practice have also given place to means which the enlightened observation of practitioners has discovered to be better adapted to subdue or counteract diseased action. We accordingly find bleeding only resorted to in urgent cases; salivation is almost wholly discarded, as a means of curing fevers; calomel is given less often, and more sparingly; drastic purgatives mostly abandoned, and nauseants limited to particular cases. In the meantime, other means have become fashionable—almost all of which, I wish it to be noted, are stimulants—such as opium, quinine, spirits of turpentine, etc. This change has been brought about so gradually and so silently, that one can hardly tell when or how it was done, or point to any person in particular who has been prominently instrumental in bringing it about; and many successful practitioners perhaps would be puzzled to give a sensible reason for the change, unless it should be the ever-ready one, that diseases have changed, and the mode of treatment had to be varied accordingly. But this reason is more specious than sound; for although it must be acknowledged that fevers are of a lower grade of action in this country now than they were twenty years ago, still



LONG TAPEWORM. (*Tænia solium*.)



TRICHINÆ. (*Tricocephalus dispar*.)

the difference is not so great as to sanction a *contrary* mode of treatment. The description of fevers by our oldest authors will do very well by which to identify them yet. Even the modern disease, as some suppose it, typhoid fever, was very accurately described by Sydenham in 1685, under the name of *stationary fever*. The fact is, man has remained, ever since we have any history of his characteristics, very much the same kind of animal: he eats and sleeps, loves women and wine, and other excitements, just as he did in the days of father Noah. The laws of nature, I suppose, have since that time undergone but little change, and it is fair to presume that, both remaining the same as of old, like causes will produce like effects still. But while the laws of matter and of vitality have remained the same, man's knowledge of them has been steadily enlarging, and, as a consequence, there has been a corresponding change in the means which he calls into requisition to correct the aberrations of vital action as he has improved in the knowledge of the workings of the vital forces and the nature of their aberrations, and the nature of curative agents with regard to the relation they sustain to the vital forces. And I am proud to be able to say, in truth, for the profession of the present age, that they have made larger advances in obtaining a correct knowledge of the laws of matter and of life, than were accomplished in any other, or, indeed, in many other centuries; and I am glad that I can say that the practice of the present time is not what it was when I studied the rudiments of my profession: the change has been for the benefit of mankind, as well as for the honor of the profession of medicine.

But to return to the subject under consideration, that the present prevailing practice is a stimulating one, and therefore this plan of mine is in harmony with the tendency of the age. I claim very little that is original; merely this, that I have pointed out, somewhat more clearly than was before done, the nature of the remote cause of fever, the kind of impression first made upon the system, and the effects produced by these impressions; and then pointed out the means by which these effects can be best removed. I

have shown why stimulation should cure, and how it cures, and thus, by understanding exactly what is wanted to be done, I have been the better able to select the exact articles best adapted to meet the indications. I have said that opium, quinine, and spirits of turpentine are the means now most relied on in the treatment of fevers, and we know that they are all powerful stimulants; and I contend that it is exactly because they *are stimulants* that they have attained their present popularity. But they are not the best stimulants for this particular purpose. Opium is essentially a nervous stimulant; given in moderate doses, it excites the nervous centres and causes increased nervous power to be sent out through the whole system, and in this way becomes, indirectly, a general stimulant. But in large doses it overwhelms the brain and other nervous centres, and disqualifies them for sending out their usual influences; hence loss of consciousness, loss of sensation, diminished circulation, diminished or suspended secretion, diminished irritability—in short, diminished vitality. And although there are occasions when the bringing about of this fearful state of things is not only proper, but imperatively called for, yet it is always obtained at a serious loss of vital energy, and should not be resorted to when less objectionable means will succeed.

MODES OF CURE.

Some, perhaps, may think lightly of my system, because it promises to do so much by means of so few remedies; but it is not more restricted in its means than many other systems which have at different periods obtained the ascendancy and run the round of popularity. In fact, every theory of fever has suggested a certain class of remedies as the appropriate means for effecting the object thought necessary to be accomplished, and these means have generally been few.

The Humoralists relied upon a few bold detergents; the disciples of Cullen and of Rush, upon the lancet, and a few other debilitants; the Sympathetics, upon mercury almost entirely; Broussais, upon the lancet and demulcents; the followers of Cooke, upon calomel and the cava pills; and

the present dominant practice embraces little more than the trio, opium, quinine, and turpentine.

The fact is, that this limiting of remedies is characteristic of science, and distinguishes it from empiricism.

In the dawn of medical knowledge, when there was nothing to guide the practitioner but blind experience, a doctor's prescription often embraced a multitude of medicines—sometimes as many as fifty, including those of the most diverse and contrary powers; and while some of these might happen to suit the case, others would be useless, and others injurious. It is the glory of the scientific physician of the present day, that he gives nothing without having a specific object in view, which he expects to accomplish by its exhibition; and as the elements of disease are always few, it follows that the better these elements are known and recognized, the fewer will be the means called into requisition to meet the indication.

It would be very strange if any theory should be originated by a great mind, and receive the assent of the learned for a considerable time, unless it were founded upon some ascertained undeniable truths. We accordingly find that each of the theories of fever which have received the confidence of the medical profession at different periods, was based upon some of the recognized phenomena presented in the progress of the disease, and hence all contain some truth. The ancient Humoralists perceived the nervous disturbance and the capillary engorgement, and if the case terminated favorably, they saw that much morbid matter was thrown off by the secretory organs, and believed that these vicious humors had caused the disease. Now it is a truth that morbid matter does accumulate in the blood in every case of fever, but it is a consequence, and not a cause: the secretions being suspended by the debility of the capillaries, and the spasm or altered sensibility of their secretory terminations, a retention of the excrementitious parts of the blood is the consequence, and a depravity of that fluid is the result. But the *condition* of things which caused the fever and suspended the secretions must first be removed, either by art or nature, before the secretory

organs *can* be made to act, so as to depurate [purify] the blood ; so that the cure is actually performed before the expulsion of the morbid matter.

The next theory in succession—that of spasm of the extreme vessels, and peccant matter in the blood—was based upon the observance of pretty much the same phenomena as the pure humoral. Those who embraced this theory had their attention drawn to the spasm which evidently takes place in most cases of fever in some degree, and in high grades forms the most prominent symptom ; and supposing that the engorgement of the capillaries was, in all cases, wholly caused by this spasm of their mouths, went to work to cure the disease with this idea prominent above all others. But this spasm is not the prime cause of the congestion of the capillaries, for the congestion takes place in the stage of depression, before there is any evidence of spasm, which only comes on during arterial excitement, and gives way when that is allayed. In low grades of fever, there is little or no evidence of spasm at any time ; and in the collapsed stage of all grades, it is not only wholly absent, but the mouths of the capillaries are often so relaxed, that they pour out, as we have seen, the fluid constituents of the blood without check and without alteration ; producing effusions, colliquative sweats, or diarrhoea. But the purple hue of the surface shows that the capillary debility and engorgement are *still* not at all relieved.

The sympathetic theory was based less upon truth and reason than either of those which went before it ; still, there may be found some support for it in analogy : we know that a specific action does obtain in some forms of chronic disease, by which a peculiar organization is produced, and until the specific action of the vessels is changed, they will manufacture no other product ; but the action in fevers is not specific, but is simply too high or too low, and all that is necessary to be accomplished, in order to remove the disease, is to equalize the action ; for as soon as this is done the fever is gone, though the patient may still be feeble and require time to regain his vigor ; yet the

moment there is harmony established between the action in the large blood-vessels and the capillaries, the fever is destroyed.

The Broussain theory being based upon supposed inflammation in the stomach and bowels—a circumstance which often does actually exist in many cases of fever, and in all there is that condition which constitutes the first stage of all inflammation, viz., nervous disturbance and capillary debility, followed by engorgement—had therefore many undeniable facts to lean upon; but as this condition of the digestive organs is only a part of a general condition obtaining throughout the entire system, it must therefore be a consequence and not the cause of the febrile movement; in other words, the aberrations observed in these organs being coëxistent with like aberrations in every other part, must be referable to the same cause; and, in fact, all do arise from general nervous disturbance, which has produced general capillary debility. The one idea of the disciples of this theory was to subdue inflammation, which naturally suggested the lancet, demulcents, tisans, etc.

The next theory considered was that of venous congestion: this had a most prominent phenomenon, one that is conspicuously observable in every case of fever, to rest on. But it is strange that the far-seeing mind of Professor Cooke failed to perceive that venous congestion cannot, in the nature of things, ever take place without capillary obstruction: mere weakened action of the heart can never be the cause of venous congestion; for while the capillaries continue to act with usual vigor, there can be no oppression of the heart, for we see that they pass the blood on from the arteries to the veins, even after the heart altogether ceases its motion; and if the heart acts, though it should be feebly, it will send the blood on and relieve the veins, unless there is obstruction. We often see those whose pulse is ordinarily so feeble that it can but barely be felt, and yet the individual feels well—there is no venous congestion; and, on the contrary, we often find the heart in the hot stage of fever beating with many times its usual force, even causing the whole frame to tremble under

the shock of its power ; yet there is, nevertheless, great venous congestion at the same time. So we see that Cooke was wrong in giving weakened action of the heart as the cause of venous congestion.

CHAPTER VII.

ERUPTIVE FEVERS.

VARIOLA, OR SMALL-POX.

NOTWITHSTANDING the discovery of Jenner, which justly immortalized him, through the inattention of the people this dreadful disease almost yearly makes its appearance in our large cities, and along the great thoroughfares. Hence it becomes necessary that everybody, and especially every physician, should be able to recognize the disease, and give it the best treatment that the light of the present age affords.

The forming stage of this disease cannot be distinguished from that of measles, scarlatina, or, in fact, any other fever; it is only when the eruption begins to appear that it can be identified; and here I will hazard a statement, which will run foul of authority—that is, that this disease cannot be communicated until after the eruption is pretty well formed. Much inquiry and close observation have fully convinced me that this is the case; and by knowing this to be true, much alarm and uneasiness may often be prevented. I am aware the contrary is true of measles and scarlatina, the most contagious period of which is during the preliminary fever. If this were so of small-pox, the disease would, every time it makes its appearance, spread among all the friends and visitors.

When the eruption does make its appearance, it can be immediately recognized by any one who will preserve the

type in his mind, it being unlike any other. The first appearance is a few very small and exceedingly red points, scattered over the breast, and next appearing on the face. These points are smaller and of a deeper scarlet red than any other eruption for which it could be mistaken. Twenty-four hours subsequent you will find the number of points increased, sometimes very greatly, and now are more numerous on the face: hence, I suppose, the mistake of authors that it always begins on the face, the few that first appeared upon the breast having been overlooked. By this time the first points that made their appearance have begun to fill with a clear limpid secretion, and have lost their peculiar redness. As these vesicles enlarge, they become surrounded by a circle more or less red, according to the amount of fever which is present.

These vesicles soon acquire a slight depression in the centre; but in the course of four or five days they again assume the rounded form, owing to the lymph giving place to suppuration. They now are much enlarged, and have acquired an opaque yellowish appearance.

In three or four days more, the pustules begin again to sink in the centre, and often part of the matter oozes out, yielding an exceedingly unpleasant odor, and so peculiar as to be always readily recognized afterward. In five or six days more the scabs fall off, leaving deeply discolored spots, and often unsightly pits.

The disease as described above is known as *distinct* small-pox. Sometimes the pustules, particularly on the face, are so numerous that they run together, making large continuous patches; this is known as *confluent* small-pox. Then, again, the pustules may merely touch without running together, which is called *semi-confluent*.

The stages of this disease are nearly as follows: Period of incubation, or time between receiving the contagion and accession of fever, twelve days; period of fever before the eruption appears, three days; pustular stage, four days; drying stage, four to six days. This is true with regard to the eruption on the face and breast; that upon the body



BONESET. (*Eupatorium perfoliatum*)



THORN APPLE. (*Datura Stramonium*)

and extremities, by appearing later, will also be behind in all the stages.

From the time that the fever commences until the eruption is fairly out, the patient is commonly quite sick; complains of headache, nausea, pains in the bones, considerable fever, etc.; but when the eruption is fairly out, all these symptoms generally give way very suddenly, and the patient complains but little, except of the surface, until the suppurative stage commences; secondary fever is now set up, which often runs very high, and in confluent small-pox often causes death.

TREATMENT.—The treatment of small-pox was once perfectly murderous—giving hot teas and stews, keeping the patient shut up in a close room, and forbidding water.

This same treatment is yet followed by some of the ignorant pretenders to whom the management of this disease is sometimes committed. At the present time the received practice is palliative; viz., in the first stage, while there is much fever, cooling drinks and very light nourishment, with occasional spongings of the surface with tepid water, and keeping the bowels gently open with seidlitz, or a little epsom salts or cream of tartar, and a few grains of Dover's powder at bedtime, to allay restlessness and procure sleep.

When the pustules commence maturing, if the fever is of rather a low type, and the pustules fill tardily, nourishing soups and wine should be given. At every stage of the eruption the patient should be anointed with olive oil at least once a day; and when the matter commences oozing from the pustules, the surface should be thoroughly cleansed with soapsuds, and then oiled. This treatment is generally successful; still, deaths are not unfrequent, and deformity by pitting quite common.

the disease was not contracted. Since then I have always recommended mothers to use this precaution when taking their children to camp-meetings and other public assemblages, when the disease was known to be in the vicinity ; and, so far as negative evidence can prove any thing, trials enough have been made to settle the question as to its power.

ERYSIPELATOUS FEVER—ERYSIPELAS.

Erysipelas is often a local disease, arising from local causes, as wounds, etc. ; but, as it also not unfrequently appears as a distinct idiopathic fever, and is sometimes even epidemic, it may properly be classed with particular fevers of the eruptive kind. This disease is usually ushered in with the common symptoms of the first stage of fever, viz. : languor, general uneasiness, aching or soreness in the limbs and joints, chilliness, or rigors, alternating with flushes of heat, succeeded by a frequent pulse, hot skin, a furred tongue, anorexia, thirst, sometimes nausea and vomiting, headache, restlessness, muscular weakness, and not unfrequently soreness of throat, or swelling of the lymphatic glands in the vicinity of the part which is to be the seat of the cutaneous inflammation, as of the neck in erysipelas of the face, and of the axilla or groin in that of the extremities.

On the second or third day of the fever, though sometimes earlier and sometimes later, and occasionally as the first observable phenomenon, there may be seen, upon some part of the surface, a small reddish spot, usually somewhat elevated, painful, and tender to the touch. This may occur upon any portion of the body, but is much more frequent upon the face than elsewhere, especially upon the side of the nose, the cheek, or the rim of the ear. The inflamed spot gradually spreads, usually in all directions, though often more rapidly in one than in another, exhibiting almost always as it advances an irregular, abrupt, and somewhat elevated margin, which forms a striking boundary between the sound and the diseased skin. In some instances the border is less definite, though scarcely ever gradually shaded

off like ordinary inflammation, so that it cannot be traced. The diseased surface is red, often shining, hot to the hand, and generally harder than the sound skin. The redness disappears under the pressure of the finger, but quickly returns when the pressure is removed. The distance to which the inflammation extends differs greatly. In some instances it advances slowly, and is confined within narrow limits; in others it spreads quickly over large portions of the surface, and, in certain comparatively rare cases, does not cease to make progress until it has invaded successively every part of the skin. Almost always its progress is continuous; but now and then instances occur in which it attacks in succession separate and even distant parts of the body.

In the face, it sometimes confines itself within the limits of the features, but generally has a tendency to spread upward to the scalp, and not unfrequently extends over the whole head, and even downward to the neck, though rarely so far as the chest.

There is usually considerable swelling, the skin being thickened and hardened, and the subcutaneous cellular tissue in general more or less distended, especially in parts of loose texture, as in the eyelids and about the eyes, in the scrotum and prepuce, and in the vulva, which parts are apt to become strikingly edematous.

The face is often so much swollen that every characteristic feature is obliterated. The eyes are closed, the lips, nose, cheeks, and ears greatly enlarged, the nostrils so much obstructed that the patient cannot breathe through them, the mouth so stiff that he speaks with difficulty, and the external orifice of the ear sometimes so much narrowed as to interfere with hearing. When the disease extends over the scalp, this is usually much swollen and puffy, and the whole head sometimes enormously enlarged.

A burning, tensive, pricking, and smarting pain is usually experienced, and the parts are so tender that pressure produces much uneasiness. When the whole scalp is affected, it is difficult for the patient to find a comfortable position for the head. The pain, however, often remits.

Sometimes the inflammation gradually rises for three or

four days, then gradually subsides, without apparent effusion of any kind, and terminates in desquamation; [scaling off.] But more frequently, about the third or fourth day, the cuticle is elevated by a serous liquid, which sometimes appears in the form of minute vesicles, sometimes blisters or blebs, like the bullæ of pemphigus, from a quarter of an inch to an inch or more in diameter, which occasionally run together, so as to produce an extensive blistered surface. The surface is often moistened by exudation from these vesicles, or their rupture. On the fifth or sixth day they begin to dry, and on the seventh or eighth form small crusts or scales, which usually separate by the tenth, leaving the skin covered with a new cuticle. When the hands or feet have been affected, the cuticle sometimes separates entire, so as to form a mould of these parts. The redness and swelling subside at the same time, and are nearly or quite gone when the crusts are fully formed. The whole duration of the inflammation is thus, in favorable cases, about a week, though sometimes shorter, especially in the young and healthy, and sometimes, from various causes, considerably protracted. Even after desquamation, it is sometimes long before the skin acquires its natural appearance and flexibility.

The course of the disease often varies more or less from that above described. Thus, while the part first affected is going through the regular changes, the inflammation may have advanced to another part, which goes through its own periods of advance and decline; and so on with different parts successively, so that the disease may be prolonged for a month or more.

After the removal of the cuticle from the vesicated parts, the surface sometimes continues to exude an acrid lymph for several days, and may even pass into a state of suppuration or ulceration, which greatly retards the cure.

In some cases the inflammation in the subcutaneous tissue ends in suppuration, and even in gangrene of the cellular tissue. In the former case, pus of a healthy appearance escapes through ulcerated openings in the skin; in the latter, grayish strings of the dead membrane, like wet tow, come



BLOODROOT. (*Sanguinaria Canadensis*.)



CALAMUS.



BEARBERRY. (*Uva Ursæ*.)

away, along with a thin, ichorous, and fetid purulent discharge. The face sometimes presents the disease at once in its different forms: portions undergoing resolution without vesication, others exhibiting vesicles on the surface, and others, as the parts about the eye, discharging pus and disorganized cellular tissue. The tissue beneath the scalp not unfrequently, in bad cases, passes into this gangrenous state, though the skin itself generally remains sound, except when ulcerated to permit the escape of the dead matter. But this condition of the disease is still more frequent upon the limbs and trunk. In these parts, the pus not being duly confined, as in phlegmonous inflammation, by the exudation of coagulable lymph, often travels great distances, destroying the subcutaneous cellular and adipose tissue, dissecting the muscles, and involving life in great danger. Even where recovery takes place in such cases, deformity may ensue from the resulting contraction, and difficulty of movement from the adhesions which may form among the muscles, or between them and the skin. Sometimes gangrene of the skin itself is added to the various mischief. This happens more especially in the extremities. It is obvious that in all these cases, when not fatal, recovery must be considerably postponed.

During the continuance of the cutaneous inflammation, the fever also continues, and sometimes in a greatly aggravated form. In vigorous constitutions, with no asthenic tendency in the disease, the pulse remains full and tense, without being very frequent; and, unless the inflammation invades the scalp, though there may be a little occasional delirium, the fever has generally an open inflammatory character, and offers little to cause alarm. But when the scalp is involved, symptoms of cerebral disorder are very often evinced, such as headache, tinnitus aurium, restlessness, and decided delirium, or, what is perhaps more frequent, and constitutes one of the most striking features of these cases, a tendency to drowsiness, stupor, and even coma.

The most alarming form in which erysipelas has ever appeared is that known as *black tongue*. Some years since it prevailed in many parts of our country with great fatality, and we still occasionally hear of its existence, but not in a form to produce such consternation as it did in the years of 1842 and 1843. In 1845 it prevailed pretty extensively within the bounds of my practice. My cases all recovered under apparently very simple treatment. I had the mouth and throat frequently washed with the following mixture: Decoction of oak bark, one pint; apple vinegar, one gill; carbonate of ammonia, one drachm (about a teaspoonful;) oil of sassafras, thirty or forty drops. A tablespoonful of the above mixture was also given internally every two or three hours. I also gave two or three grains of sul. quinine every two or three hours, and had their bowels moved every day by castor oil.

Erysipelas occurs at all seasons, but most frequently, as is asserted, in the spring and autumn. All ages are liable to it. Women are said to be more frequently affected than men. One attack offers no security against a second.

The inflammation in erysipelas is of a peculiar nature, and derives that peculiarity from some not understood state of system, or from some equally unknown peculiarity of the cause. That it differs from ordinary inflammation is proved by its disposition to spread, the distinct boundary it preserves in spreading, the severe burning which attends it, its tendency to gangrene, and the indisposition it evinces to the secretion of coagulable lymph, which is so characteristic a product of phlegmonous inflammation. In the disease now under consideration, it is obvious that the fever, though it may be aggravated by the local affection, is wholly independent of it in its origin; for it often precedes the inflammation by one, two, or three days. It is highly probable that, in cases of traumatic erysipelas—that arising from local causes—there may be the same constitutional state, but in a degree insufficient to excite fever without the aid of the local disease.

It may be difficult or impossible to distinguish the initial

fever of erysipelas, before the appearance of the cutaneous affection, from many other febrile diseases; but Frank has pointed out a symptom which he considers diagnostic; and Chomel and Blache in relation to it make the following observation: "Whenever a patient has exhibited, for twenty-four or forty-eight hours, an intense febrile movement, attended with *pain, swelling, and tenderness of the lymphatic glands of the neck*, we have not hesitated to announce the approaching development of erysipelas, and in no case has the diagnosis been invalidated by the result."

As the disease commonly appears in good constitutions, it very generally ends favorably. In erysipelas of the face, the chief danger arises from the brain becoming involved, and this is most likely to happen when the inflammation invades the scalp, though this last event often occurs without serious consequences. A sudden disappearance of the external disease, with the occurrence of symptoms indicating internal irritation or inflammation, is unfavorable. Such a metastasis is most likely to happen in the wandering variety. The phlegmonous form is, in other respects, more dangerous than the superficial. The gangrenous variety is very dangerous. The very old, the intemperate, and those already nearly worn out by previous disease, are apt to die. This is peculiarly the case in dropsy, in which a fatal erysipelas often attacks the swollen limbs, especially after punctures; but death, in these instances, is only a little hastened. The disease is often fatal when it occurs near the close of febrile diseases; though recoveries also, under such circumstances, often take place. The prognosis is always more unfavorable in hospital than in private practice. In new-born children the disease is exceedingly fatal; as it also often is when it occurs epidemically, and whenever it puts on a malignant form. Coma and continued delirium are always unfavorable symptoms.

CARDITIS.

Carditis, or inflammation of the muscular substance of the heart, seldom occurs as a distinct affection; being generally combined with pericarditis or endocarditis, or with both. An instructive example has been recorded by Mr. Salter, in which the disease ran its course in seven weeks. It commenced with an acute pain in the left side of the chest, which came on when the patient was walking, lasted a short time, and recurred about a week afterwards, whilst he was using the same exercise; it subsequently became very frequent, and was induced by the slightest exertion. When Mr. Salter first saw him, about a week before his death, there was orthopnoea, and an uneasy sensation or dull pain referred to the stomach and middle of the sternum, [breast bone.] Venesection, calomel and opium, and counter-irritation, were the means adopted to stay the disease; but they were unavailing, and death took place. At the *post-mortem* examination the pericardium was found inflamed, especially its diaphragmatic portion; its vessels were distended, and spots of ecchymosis [effusions of blood] were found beneath the serous membrane. The substance of the heart was moderately firm; but the left ventricle had almost entirely lost the color of muscle, pus could be scraped from its surface, and in some parts there were small cavities in the muscular substance containing pus.

VALVULAR DISEASES OF THE HEART.

Causes, etc.—Most of the alterations in the internal lining membrane of the heart result from inflammation, which gives rise to a deposit of lymph upon or beneath the serous membrane. The valves thus lose their thinness and transparency, become thick, puckered up, and adherent to each other or to the opposite walls of the channel. Independently of inflammation, the valves may become covered with warty vegetations or excrescences, or they may be converted into bone.

The effects are twofold: either to contract and narrow the orifice, and so obstruct the passage of the blood—*valvu-*



PINKROOT. (*Spigelia Marilandica*.)



PURPLE FOX-GLOVE. (*Digitalis purpurea*.)



BLACK HENBANE. (*Hyoscyamus niger*.)

lar obstruction; or by thickening and shortening the valves to make the orifice more or less patent, [open,] and hence permit of regurgitation of blood—*valvular insufficiency, regurgitant disease of valves*, etc. There may be only valvular obstruction or valvular insufficiency in any given case; but often these conditions coëxist.

Diagnosis.—In the diagnosis of these diseases, attention must be directed, firstly, to the physical signs; and secondly, to the chief physiological or functional symptoms.

1. *The Physical Signs.*—The natural sounds of the heart are liable to be modified or changed by disease, causing either sound or both to be accompanied or to be supplanted by a noise which has been aptly compared to the blowing of a pair of bellows; hence it is termed by us a *bellows-murmur*, and by the French a *bruit de soufflet*. A bellows-murmur may be harsh, or rough, or cooing, or whistling, or musical, but these modifications are of little importance; of whatever nature, it is caused either by the presence of obstructions which impede the free flow of blood through the heart and its great vessels—producing an organic murmur; or by a supposed peculiar condition of the blood—giving rise to an inorganic murmur. When the valves of the heart are affected so that they act ineffectively, an organic bellows-murmur results.

2. *Physiological and Functional Symptoms.*—The following are the chief: Difficulty of breathing, varying from the slightest dyspnœa to the most severe orthopnœa; much increased on ascending a height or making any exertion. Palpitation and irregular action of the heart, with the sounds and murmurs discoverable by auscultation, etc. Irregular pulse. In mitral disease, the pulse is generally soft and irregular; in aortic, hard, jerking, but regular. Congestion of the lungs; bronchitis; pneumonia; pulmonary hemorrhage, with or without pulmonary apoplexy; these symptoms being most urgent in mitral disease. Hemorrhages from the nose, bronchial tubes, or mucous membrane of the stomach. Dropsy. Enlargement of the liver and spleen, with disorder of the digestive organs generally. A peculiar appearance of the counte-

nance, wherein the face is puffed, the cheeks flushed and of a purple hue, the lips congested, and the eyes bright.

As time advances, the heart disease generally becomes more aggravated: the patient becomes weak, and suffers immediately from over-exertion, mental emotion, improper food, or exposure to wet and cold; and subsequently death ensues, either suddenly from syncope, or gradually from the progress of one or other of the secondary affections. The latter termination is the most common.

Treatment.—In the treatment of the valvular diseases of the heart, three indications have generally to be followed:

1st. To abate inordinate action of the heart by sedatives, as digitalis, hydrocyanic acid, and morphia. 2d. To ward off or gradually relieve the results of the cardiac disease, such as pulmonary congestion, pneumonia, hemorrhage, congestion of the liver and kidneys, dropsy, etc., by a nutritious diet, and by maintaining the various secreting organs in a healthy state; and 3d. To endeavor to give strength and tone to the heart, so as to assist it to do its work, by nourishing food, a duly regulated supply of stimulants, breathing pure air, warm clothing, early hours, avoidance of all bodily and mental excitement, and by the administration of tonics—especially the various preparations of steel.

HEPATITIS, OR INFLAMMATION OF THE LIVER.

Fever, tension, and pain of the right hypochondrium, often pungent, as in pleuritis, but sometimes dull, pain in the clavicle and top of the right shoulder, uneasy lying on the left side, difficult respiration, dry cough and vomiting, are the characteristics of hepatitis; very frequently there is some degree of jaundice.

Hepatitis has generally been considered of two kinds; the one acute, the other chronic; the former showing the essential character of genuine inflammation; the latter exhibiting symptoms of less violence as to their inflammatory tendency, but an enlargement and hardness of the liver, with an obtuse pain.

Besides the causes producing other inflammations, such as the application of cold, external injuries from contusions,

CHAPTER II.

SPECIFIC INFLAMMATIONS.

UNDER the above head, we will include the various forms of tuberculous or scrofulous, cancerous, and syphilitic diseases, all of which seem to be the result of a species of morbid action, which, though not of the precise nature of ordinary inflammation, yet is no doubt analogous to it, and often gives rise in its progress to true inflammatory action, modified, however, by the peculiar condition of the system, or of the part which may be affected by the specific action of the original disease. We will take the liberty of quoting pretty largely from Wood upon this subject; and, first, of

TUBERCULOSIS, OR SCROFULA.

In certain cases of the system, a solid extravasated matter is deposited in various parts of the body, which, from the shape ordinarily assumed by it, is called *tubercle*. The morbid state of system which leads to this deposition may be denominated the *tuberculous diathesis*. It is closely analogous to, if not absolutely identical with that which usually precedes the development of scrofulous tumors, and which is denominated *scrofulous* or *strumous diathesis*. In this work, they are considered as one affection. When this state of system becomes decidedly and obviously morbid, it is sometimes called *tuberculous*, *scrofulous*, or *strumous cachexia*. The tuberculous deposition takes place in one of two forms: either that of small, isolated bodies, or that of irregular infiltration into the tissues. In either case, the matter as first deposited may be gray, semi-transparent, and hard, or yellow, opaque, and rather soft. According to Laennec and Louis, the deposit is originally of the former

character, and afterwards assumes the latter. But the matter is often found in both conditions at the earliest period at which it can be examined; and it seems to the author that, unless otherwise proved, it must be allowed to have been thus deposited.

When in the form of gray, semi-transparent, hard corpuscles, the tubercles have been variously denominated *miliary tubercles*, *tuberculous granulations*, and *gray semi-transparent granulations*. They do not at first exceed a millet seed in size, but gradually increase till they become as large as a cherry-stone or larger. A yellow spot soon makes its appearance within them, which enlarges by degrees until the whole tubercle is converted into a yellow, opaque, curdy matter, so soft that it may be crushed between the fingers. Sometimes they are in this state when first observed. The process of change continues, the softness increases, and the tubercle at length breaks down into a pus-like matter, with which are often mingled portions of the tuberculous substance in a cheesy form. This sort of mixed matter may sometimes be found in the centre of the tubercle, while the circumference remains still hard and unaltered. Not unfrequently, numbers of the miliary tubercles are aggregated together, forming a considerable mass; in which case, several points of alteration may be observed in different parts of it.

The infiltrated tubercle may be in the shape of large irregular masses, as in the lungs; of flattened patches, as upon the serous membranes; or of sheaths to the blood-vessels, as about the veins of the pia mater.—*Louis*. It undergoes the same changes as the isolated tubercles, from the gray and semi-transparent, through the yellow, opaque, and soft, to the semi-liquid pus-like matter.

When thus mature, the tubercle excites inflammation, and consequent ulceration in the surrounding tissue, by which, in many instances, a passage is made for the escape of its contents. The walls of the resulting cavity, which are sometimes lined by a sort of cyst, sometimes consist only of the consolidated surrounding tissue, secrete pus, which continues to be discharged for a long time, often

mixed with the curdy matter. In many instances, however, a healing process at length takes place, the cavity is filled, and a cicatrix only remains. This is especially the case in scrofulous affections of the lymphatic glands. Sometimes there is reason to believe that it takes place also in the lungs, though in the latter the process of deposition and destruction generally goes on more rapidly than that of reparation, and the result is fatal. Sometimes, instead of the series of changes above described, the tubercle undergoes another process, by which the organic matter is absorbed, and an earthy or chalk-like substance is deposited in its place. This may always be regarded as a favorable termination.

The time occupied in these transformations is very uncertain. Sometimes the tubercle remains long quiescent in its original form; and when the change begins, it may be completed in a few weeks, or may continue in progress for years. Not unfrequently, the disturbance produced by the tubercles in the tissue in which they are deposited proves fatal before they have passed even their first stage. This is more apt to happen when the tubercles are deposited in vast numbers, as sometimes in the lungs and the serous membranes.

Tubercles may be formed in almost any portion of the body, and often exist in many parts at the same time. They are most frequent in the lungs, and, indeed, in adults are seldom found in other parts, without existing also in greater or less number in that structure. This, however, is not a universal rule. In children they are often found elsewhere, though wanting in the lungs. After the lungs, the parts most frequently affected are, according to Louis, *first*, the lymphatic glands; *then* the pleuræ, the intestines, the spleen, the liver, the peritoneum, the membranes of the brain, the brain itself, and the bones; and *lastly*, the pericardium, stomach, kidneys, pancreas, etc. In their various positions they produce great disturbance in the surrounding tissue, and give rise to morbid affections, which have received different names according to their seat and character. Thus, in the lungs they produce phthisis; in the

pleuræ, chronic pleuritis; in the peritoneum, chronic peritonitis and abdominal dropsy; in the mesenteric glands, *tabes mesenterica*; in the arachnoid, hydrocephalus; in the lymphatic glands, external scrofula; and in the bones, white swellings, caries, necrosis, etc.

All ages are liable to tuberculous disease, but the two extremes of life are most exempt. From the researches of M. Papavoine, it appears that before the end of the second year it very seldom occurs; from this period to the end of the fourth year, is more frequent; and from four to thirteen, is exceedingly frequent. After the age of puberty there is some exemption; but the liability returns towards that of maturity, and from eighteen to thirty-five or forty is very great. After this it lessens, and the disease is rare in old age, at least as an original affection.

It must be evident, from the foregoing account, that this is not a local disease. The tubercles can appear in so many different parts at the same time only in consequence of some general depravation of the system. In what this depravation consists is not evident. It has been thought to occur preferably in individuals who present certain natural physical traits. Thus, persons have been said to be peculiarly predisposed to it who have a clear white or rosy complexion; a soft, delicate skin; large lustrous blue eyes, with long eyelashes, and a pearly sclerotica; thickness of lips, especially the upper; a narrow flattened chest, with high shoulders; and, in childhood, a bright, active spirit, and precocious intellect. There is no doubt that persons with the above characters have often been subjects of tuberculous disease; but too much stress was at one time laid upon the complexion, and the color of the hair and eyes. Observation has shown that about as large a proportion of persons with dark hair, dark eyes, and a swarthy complexion are affected, as of those with opposite physical characters. Negroes are, in this climate, more disposed to the disease than the whites.

But more confidence may be placed in the signs which indicate a commencing development of disease, and which often long precede the deposition of tubercle. Such are a

pale, somewhat puffy countenance; swollen lips, which are apt to be sore and chapped in cold weather; tumefaction about the nostrils; occasional purulent discharges from the nostrils or ears; a tendency to soreness of the eyes, and especially to a vesicular eruption upon the conjunctiva; vesicular eruptions behind the ears, and in different parts of the head and face; sourish or otherwise disagreeable exhalations from the skin; slight swelling and induration of the glands of the neck, and enlarged tonsils; a rickety condition of the bones; a weak but excitable pulse; flabby muscles; a rapid increase in height, without corresponding lateral development; and general weakness, indicated by fatigue after moderate exertion. It is not to be supposed that all these symptoms are present in every case; but enough of them frequently are so to justify solicitude, and to lead the prudent practitioner to the adoption of preventive measures. Not unfrequently, a slight febrile movement, rather occasional than persistent, is observed in addition to the other phenomena; and, indeed, such a movement is occasionally the immediate forerunner or attendant upon a copious tuberculous deposition.

The tuberculous diathesis is also characterized by the modified condition of the inflammatory process which it produces. Inflammation, occurring in systems under its influence, very generally assumes a slow or chronic form, is accompanied with comparatively little heat or pain, and, after suppuration, leaves abscesses which heal very slowly, and are sometimes exceedingly obstinate. The affection, under these circumstances, is distinguished by the name of *scrofulous inflammation*. It is very often the immediate result of the tuberculous deposit, acting as a foreign body, and irritating the neighboring parts; and the purulent discharge is frequently mixed with broken-down tubercle in the form of curdy matter. But the deposition of tubercle is not a necessary attendant of all cases of scrofulous inflammation. The diathesis appears sometimes of itself to predispose to inflammation; and when that process occurs from other causes, it assumes the peculiar scrofulous character, even though no tubercles may be present.

After the formation of tubercles, and during their maturation and discharge, the system often sympathizes strongly, and there is almost always at first a simple irritative fever, and afterwards, when suppuration has become established, more or less hectic fever, which, in severe cases, rapidly exhausts the remaining strength.

From the experiments of M. Dubois, of Amiens, it would appear that the blood in scrofulous cachexia has a smaller proportion of coagulable matter in relation to the serum, and that the serum itself is of less specific gravity than in health; while the red color of the liquid is in some degree independent of the red corpuscles, as if these had undergone a partial disintegration.—*Dict. de Med.*, xxviii. 221. The blood is therefore watery and impoverished, and incapable of supplying the nutritive function sufficiently. In phthisis, according to Andral and Gavarret, the proportion of the red corpuscles diminishes, and that of the fibrin increases, with the advance of the disease. That of the red corpuscles is almost always below the healthy standard; that of fibrin often above it. But the increase of the fibrin is a result of the inflammation occasioned by the tubercles; and we have no proof that it is in excess under other circumstances.

What is the nature of this affection denominated tuberculous disease, but of which the tubercle is a mere incident, though a very general, characteristic, and most important incident? This question cannot be fully answered in the present state of our knowledge. We know that, generally, the vital energies are enfeebled, and the blood impoverished or depraved. It is highly probable that the tendency to the tuberculous deposition is due directly to the condition of the blood. But the state of the blood must itself be dependent upon some deficiency or deprivation of the functions by which it is elaborated, and we are thrown back upon some original vice in the organic constitution.

A knowledge of the causes which favor the development of the disease may aid us somewhat in understanding its nature. These are almost all of a character fitted to lessen the energies of the system, and to impoverish the blood.



BLACK SNAKEROOT.
(*Aristolochia Serpentaria*.)



SENECA SNAKEROOT.
(*Polygala Senega*.)



DEADLY NIGHTSHADE. (*Atropa Belladonna*.)



Insufficient food, confinement, want of fresh air and exercise, habitual exposure to cold, sensual excesses, great loss of blood or other depletion, and the depressing passions, greatly favor the development of tubercles, and even appear capable sometimes of generating the diathesis. It has been found, by experiment, that tubercles are generated in some of the lower animals by close confinement. But there are many individuals upon whom all these causes may be made to operate, and so intensely even as to produce fatal effects, without giving rise to this particular disease. Indeed, it is probable that the great majority of mankind might perish under these circumstances, and give no sign of tubercles. There is something more, therefore, than mere debility. There is some inherent peculiarity of the organization, generally derived or inherited from the parent, which serves as the basis of the disease. The other causes are in general merely exciting. They, no doubt, often induce the disease when it might otherwise never have been developed; but they are generally incapable of producing it, unless in subjects having some innate disposition towards it. In the great majority of fatal cases of tuberculous disease, the original and essential cause will probably be found to be an inherited peculiarity of organization.

The lymphatic system is evidently the seat of scrofula, and the lymphatic vessels are those which carry a light-colored or clear fluid. It is generally called the absorbent system; but this, we believe, is not sufficiently full to convey the whole truth in relation to its functions and uses. For the benefit of the reader, a few observations will here be made upon this system. It is composed of three orders of organs.

1st. The absorbent vessels, so called, are an assemblage of small, delicate, transparent, uneven vessels, provided with valves, arising from innumerable roots or fibres, from the external and internal surface of the skin, from the membranes of the cellular tissue, etc. "These are distributed among all the organs, like the arterial vessels, of which they are the terminations, and terminate mostly in the thoracic duct," which empties into the left subclavian

vein, and its contents become mingled with the blood; but some communicate directly with the blood-vessels. "Some anatomists distinguish the lacteals [the vessels which take up the nutrient material from the stomach and bowels] from the lymphatic vessels;" but this is useless in practice.

2d. "The thoracic duct, in which the major part of the lymphatic vessels terminate."

3d. "The lymphatic or conglobate glands." These are small, oval, reddish bodies, composed of white vessels, blood-vessels and nerves, distributed here and there along the tract of the lymphatics, as the ganglions are "along the nerves." They are in greater abundance in the fat of the bowels, along the inside of the thighs, in the groin, about the neck, in the arm-pits, and generally in all parts of the body "where cellular tissue abounds."

This system has two principal functions—absorption, and the preparation and assimilation of the nutritive fluids.

Under the first head or function "is comprised every thing that enters into the current of the circulation, to become identified with our structure," excepting those substances which, being attracted from the air, mingle at once with the blood in our respiratory organs.

"Absorption is effected," *first*, on the digestive tubes, "on the materials designed to repair the constant waste of the body;" *second*, on the surface of the skin, and on the interior of the air-vessels of the lungs; *third*, in the interior of the cavities of the body. This mode of absorption is proved to exist by the mere fact of exhalation. If no absorption took place on the surface of the internal cavities, we should soon be filled with water. *Fourth*, in all the spaces between the folds of the cellular tissue, and "wherever there are any absorbing vessels."

The second function of the absorbent system is the preparation and assimilation of the nutritive fluids. In the process of forming blood, the lymphatic or absorbent system holds an important place. By the powers of this system, the homogeneous mass, which is chymified by the gastric juice and vital functions of the stomach, loses its inanimate character, and begins to become animalized, and

makes approaches to vital matter. It is here the first step is taken from the physical to the vital world; "a species of preparation which disposes them to be clothed with the properties of the blood which they are destined to renew." This may suffice to show how great an influence is exercised by the lymphatic system on the material composition of the body. We see, therefore, that the formation of blood is essentially connected with the absorbent system; it follows all its alterations, all its vicissitudes. Thus we see that upon the lymphatic system depends, to a certain extent, emaciation of the body, as well as the excessive development of many of its parts, or redundance of fat, serous infiltratives, enlargement of the glands of any and every part of the body, the removing of glandular swellings, unnatural depositions of fat, etc. These things are, however, all performed by a vital process, and not by humoral processes or mere percolation.

The remote causes of scrofulous diseases. These are three.

First. "Every thing that may effect a diminution of tone in the solids," and particularly those of the lymphatic system.

Second. "Whatever may exalt the irritability of this system, or blunt its sensibility;" and,

Third. "Every thing that occasions chyle or lymph of a bad quality," such as unwholesome air, any derangement of the offices of nutrition, or the functions of the skin or lungs.

We now come to the predisposing or principal causes of scrofula, the first of which may be said to be *hereditary tendency*. It is a lamentable fact that a majority of the children that are born of scrofulous parents bring into the world with them this tendency, which, when it is hereditary, is apt to develop itself in early life. These facts are doubted by some; but there are too many instances by which this truth may be attested. We are acquainted with whole families in which the scrofulous taint has been perpetuated through two or three generations, says Hufeland. In countries where this disease is very common, as in England, the people are so well convinced of this truth, that

uterus, and assume, as well as the *meatus urinarius*, a horizontal position. Hence, we see in what direction a catheter should generally be introduced in these cases.

As the return of blood from the prolapsed uterus is usually more or less obstructed, the part frequently becomes very much swollen, and even copious discharges of blood occur. The naturally delicate texture of the lining of the vagina undergoes such an alteration that it seems more like the structure of the common integuments.

The friction of the clothes on the swelling, however, mostly occasions very painful ulceration on the outside of the vagina, if the prolapsus should be recent. But when the parts have been long down, they adapt themselves to their new situation, and hence we see an old neglected prolapsus attended with no particular occurrences, except the descent of the tumor when the patient is erect, and its return when she is in a recumbent posture.

Polypus is the only disease with which the *prolapsus uteri* can be confounded; and the mode of discrimination must be learned by referring to the chapter on that subject.

The causes of the *prolapsus uteri* are such as either relax the parts retaining the uterus in its natural position, or such as force this organ downward. Women who have had many children are particularly subject to the complaint. The prolapsus is also very liable to occur soon after delivery, when all the parts of generation are dilated and relaxed.

There are two indications in the treatment, viz. : to reduce the uterus into its natural position, and to prevent its descending again. The first object is in general very easy of accomplishment, when the prolapsus is incomplete. The second is effected by making the patient wear a pessary in the vagina, and use astringent injections. Incomparably, the most suitable pessary is one made of the bark of the slippery-elm, of which we will speak more at large hereafter.

The reduction of a complete prolapsus of long standing is sometimes difficult. The operation should be done before the patient gets out of bed in the morning. It is sometimes of use to empty the large intestines by a clyster before attempting reduction. However, the thickening of the pro-

lapsed viscus, and the alteration made in the position of the surrounding parts, in some instances render the design quite impracticable. In this circumstance, we must be content with drawing off the urine with a catheter if requisite, and supporting the part with a bandage.

The presence of ulcerations is no reason for not attempting to reduce the displaced part. When the tumor is very much inflamed and swollen, it is sometimes advisable to defer the attempt to replace the uterus until bleeding, the application of cold washes, etc., have diminished its size.

In recent cases of *prolapsus uteri*, we may hope to effect a radical cure by bringing the relaxed and dilated parts into another state. This may be accomplished by introducing into the vagina, immediately after the uterus has been reduced, a slippery-elm pessary; and for a time the T bandage is also to be worn, and the patient should remain for a day or two in a horizontal posture, and carefully avoid all strong efforts in going to stool, making water, etc.

INVERSION OF THE UTERUS.

Sometimes the uterus descends through its own mouth into the vagina, and occasionally quite out of the vulva. The first is the *incomplete*, the second the *complete inversio uteri*. In the latter, the vagina is also drawn down and inverted, so that the whole tumor situated before the parts of generation seems to hang by a pedicle, formed of the inverted vagina. Between this pedicle and the labia there is no interspace into which a probe can be passed. The outer surface of the tumor is, in fact, the inner lining of the uterus.

As the *fundus uteri* evidently cannot descend through the *os uteri* unless this aperture be very much dilated, it is obvious that the *inversio uteri* can rarely occur except immediately after delivery. An unskilful employment of force in extracting the placenta is a very common occasion of the accident. Polypi growing from the *fundus uteri* are, however, particular cases, in which the inversion of this organ may occur from its being dragged downward by the weight of these tumors.

Great pain, inflammation, tumefaction, and hemorrhage, usually follow the *inversio uteri*. Even mortification, convulsions, and death may take place, in consequence of the complete stage of the disorder, particularly when it has occurred in a very sudden manner.

The reduction of the inverted uterus ought not to be delayed a moment. The longer the operation is deferred, the more difficult it becomes; for, in general, pain, inflammation, and swelling come on with great rapidity. When inflammation has already occurred, leeches and fomentations should be applied to the tumor, and the reduction be afterwards attempted.

In very old cases, in which the *fundus uteri* has suffered long compressions in the vagina, the viscus becomes altered in its structure and figure so much that the inversion is totally incurable. The further descent of the viscus can only be prevented by the employment of a pessary.

ANTROVERSION AND RETROVERSION.

The uterus may either be turned forward or backward; the last is the most common, and is named *retroversio*. In the first case the fundus uteri becomes situated towards the *os pubes*, over the fundus of the bladder; while the *os uteri* is inclined towards the sacrum and middle part of the rectum, and is often situated so high up that it can hardly be reached by the finger.

The patient generally experiences a constant inclination to make water; feels pain whenever pressure is made above the *os pubis*; and, on standing up, perceives a hard body fall on the bladder, compelling her to empty this receptacle; but the tumor regularly falls backward again when she lies on her back.

This case is usually easily relieved. The practitioner should place the patient on her back, and make pressure with his hand just over the *os pubis*. At the same time a finger introduced to the upper part of the vagina is to press it forward, so as to urge the *os uteri* forward, while the pressure of the other hand is tending to push backward the *fundus*. The recurrence of the accident is to be prevented

by keeping the patient on her back, and applying a compress and bandage to the abdomen just above the pubes. In rare cases, the fundus of the womb becomes wedged, as it were, between the bladder and the vagina, and is extremely difficult to dislodge; a physician of much skill will be required in this case.

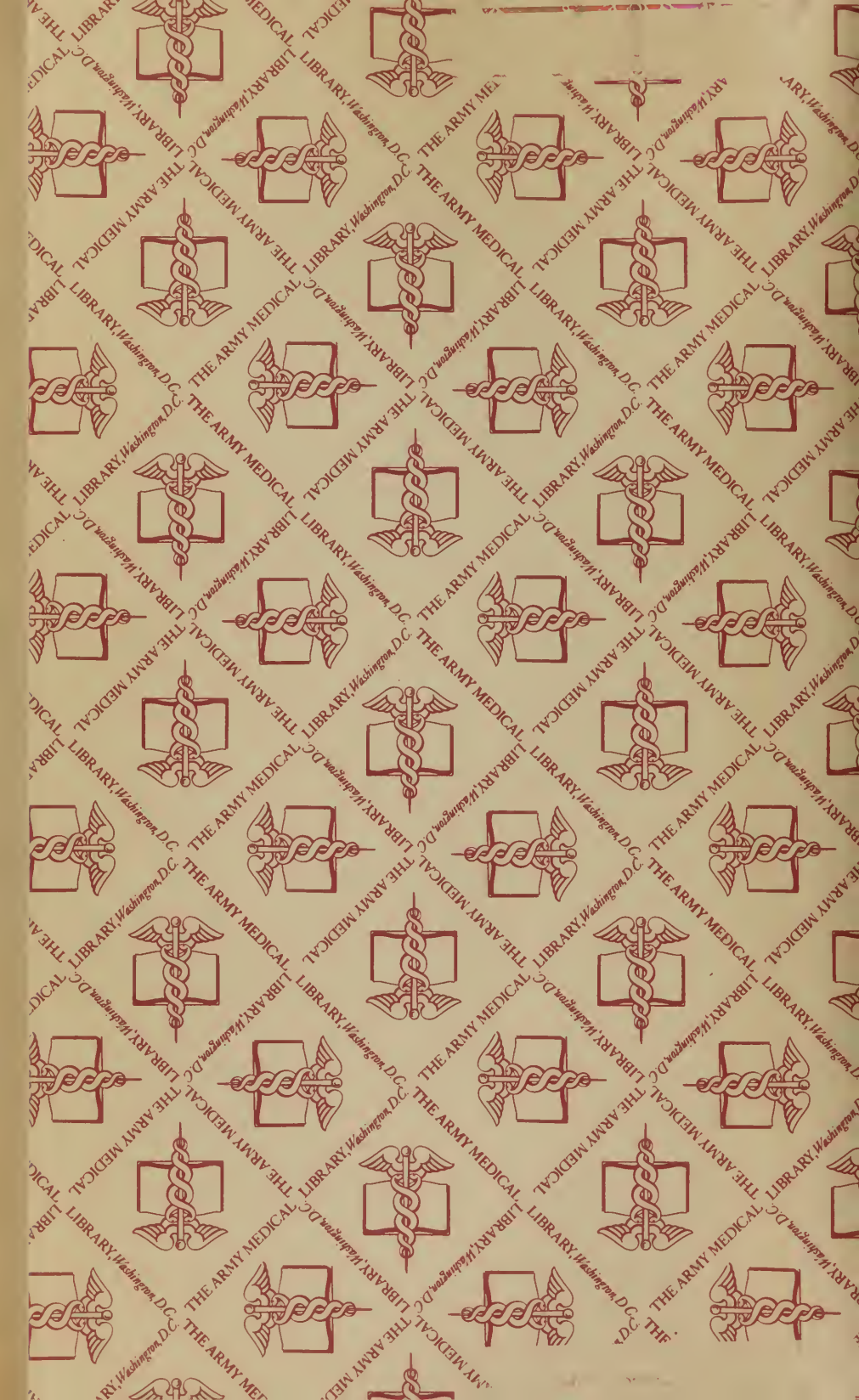
In the true *retroversio*, the *os uteri* is inclined towards the pubes, while its fundus is approximated to the sacrum, and descends so far between the rectum and vagina that it occasions a tumor at the posterior side of the latter tube. The viscus, thus situated, may render the passage of the fæces exceedingly difficult, and even impossible. As the preternatural position of the uterus necessarily displaces the bladder and urethra, retention of urine always attends the case; and this is the more troublesome, as the catheter, in such circumstances, cannot be very easily introduced. The orifice of the urethra is so drawn upward that it is sometimes situated higher than the arch of the pubes. When the bladder is very much distended, it prevents the *os uteri* from being felt with the finger. The *retroversio uteri* commonly happens during the second, third, or fourth month of pregnancy. In the latter months the uterus is too bulky to become situated between the vagina and rectum.

The retroverted uterus should always be replaced, as soon as possible, in its natural situation. The longer the case has lasted, the more difficult it is to rectify it, and the more the danger of the occurrence increases. The greatest urgency arises from the retention of urine and impediment to the passage of the fæces. The distention of the bladder and rectum must naturally render the reduction of the uterus more difficult. Sometimes abortion takes place, and this event has occasionally been known to be productive of relief.

As the return of the uterus to its natural position is always greatly facilitated by drawing off the urine with a catheter, this operation should be first performed. The uterus has often been known to resume its proper situation on the bladder being emptied. So much difficulty has sometimes been experienced in introducing a catheter in

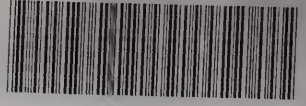
these cases, that some practitioners have been obliged to puncture the bladder. However, few who know the way in which the urethra is displaced by a *retroversio uteri* would find such a proceeding necessary. The rectum should also be emptied, if possible, by clysters.

Reduction is accomplished by making pressure on the *fundus uteri*, with two fingers introduced into the rectum. The chief impediment to success arises from the projection of the sacrum. Hence the pressure should be so directed as to avoid forcing the uterus against this part. The operation should be accomplished while the patient is kneeling and leaning on her elbows, for in this position the uterus becomes more distant from the sacrum. The *fundus uteri* should be pushed upward and forward, toward the navel. Sometimes it is preferable to make pressure with the fingers in the vagina.





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